REMARKS

The Office Action dated August 12, 2003 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto. By this amendment Applicant amends claim 1, cancels claim 5 and adds new claims 7-9, thus claims 1-5 and 6-9 are all the claims pending in the application. No new matter is included by the foregoing amendments. Claims 1-6 stand rejected. Reconsideration and allowance of all pending claims are respectfully requested in view of the following remarks.

DRAWINGS

The Office Action indicates the drawings are objected to as not showing each feature of the invention specified in the claims. Particularly, the Office Action alleges that Applicant's claimed "programmable counter unit" is not shown in the drawings. Applicant respectfully disagrees.

The claimed programmable counter unit is shown in Applicant's drawings in at least Figs. 1, 2 and 14. While not expressly labeled a "programmable counter unit" this claimed feature is observed in the example embodiments, as the EPIC (Ethernet Port Interface Controller) 20 and/or the GPIC (Gigabit Port Interface Controller) 30.

EPIC 20 (and/or GPIC 30) has separate ingress and egress functions (specification pg. 9, ll. 15) and includes a fast filtering processor (FFP) 141 therein. FFP 141 provides filter functionality used for packet classification based upon various protocol fields within the packets themselves. Various actions can be taken based upon the packet

classification, for example, packet discard, sending of the packet to the CPU, sending of the packet to other ports, sending the packet on certain COS (Class Of Service) priority queues, and changing the Type of Service (TOS). (Specification, pg. 49, ll. 20-30).

The EPIC 20, via FFP 141, applies appropriate configured filters and results are obtained from an appropriate rules table 22 and logic 1411 in the FFP 141 determines and takes the appropriate action. (Specification pg. 58, ll. 2-3). FFP 141 is programmable through a CPU 52 by a user. (Specification pg. 58, ll. 20-21).

A rate counter field for a code point in a diffserv-to-COS (Class of Service) mapping table may be incremented every time a packet comes into the switch with that particular code point, thus allowing a rate of traffic (or other factor) to be determined and/or acted upon. (Specification pg. 62, ll. 1-10). Accordingly, Applicant respectfully submits that the application figures illustrate the claimed feature of *a programmable counter unit for counting a number of packets of selected packet types that are received by the switch* in full accordance with 37 C.F.R. § 1.83(a). In view of the foregoing, reconsideration of the drawing objection is respectfully requested.

CLAIM OBJECTIONS

The Office Action indicates claims 5-6 are objected to, for having improper antecedent basis. By this amendment, Applicant amends the claims as requested. Reconsideration of this objection is respectfully requested in view of the foregoing amendments.

CLAIM REJECTIONS

35 U.S.C. § 112 (first paragraph)

Claim 3 is rejected under 35 U.S.C. § 112, first paragraph, as being non-enabling. Applicant respectfully traverses this rejection for the following reasons.

The Office Action alleges that the specification does not disclose any information to indicate a "remote CPU is used to program the programmable counter unit" as recited in claim 3. Applicant respectfully disagrees. As explained above, the instant specification describes the EPICs 20 or GPICs 30, e.g., "the programmable counter unit" in exhaustive detail. The EPICs and GPICs include the FFP 141, and FFP 141 is programmable through a CPU 52 by a user. (Specification pg. 58, ll. 20-21).

In view of the foregoing, Applicant submits that claim 3 is in full accordance with the requirements of 35 U.S.C. § 112, first paragraph, and respectfully requests the Examiner to reconsider and withdraw this rejection.

35 U.S.C. § 112 (second paragraph)

Claims 1-3 and 6 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The Office Action alleges that the term "programmable counter unit" is confusing and that it is not clear how a destination port contains a path. Applicant respectfully traverses this rejection.

Applicant submits it is not required to have claim terminology that has a one to one correlation to the words or examples in the specification. *See Robotic Vision Sys. v. View Eng'g, Inc.*, 112 F.3d 1163, 1166 (Fed. Cir. 1997) (The claimed invention subject

matter need not be described literally, i.e., using the same terms in order to comply with the requirements of 35 U.S.C. § 112).

As explained above, specific examples of the claimed programmable counter unit are shown and described throughout the instant specification. While the preferred embodiments are described using the terms EPICs and/or GPICs, Applicant's invention is not limited to this specific implementation and thus Applicant uses a more general term in the claims. Furthermore, since both EPICs and/or GPICs can serve as the programmable counter unit, it would be inappropriate to specify only one of these separate elements in the claims, thus Applicant adopted a more general term which is appropriate for both.

With respect to "how a destination port contains a path," Applicant submits that a packet cannot reach an ultimate destination without passing through a destination port (e.g., an output port) in a network switch. The destination port, i.e., the port for which the packet must travel to reach its destination, thus has its own path. This is contrasted to the path of a different destination port in the network switch.

In view of the foregoing, Applicant respectfully submits that claims 1-3 and 6 comply with the requirements of 35 U.S.C. § 112, second paragraph, and requests the Examiner to reconsider and withdraw the rejection based thereon.

35 U.S.C. § 102

Claims 1-6 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,094,435 to Hoffman et al. ("*Hoffman*"). The Office Action indicates that

Hoffman "implicitly" and/or "inherently" discloses each of the limitations of Applicant's claims. Applicant respectfully disagrees.

Claim 1, and claims 2-4 and 6-9 by virtue of their dependency one claim 1, recite *a programmable counter unit for counting a number of packets of selected packet types which are received by the switch wherein the programmable counter unit includes a rules table therein, said rules table storing rules which control packet flow based on values set in fields of a selected packet type, after a number of counted packets of a selected packet type exceeds a predetermined threshold.* Applicant respectfully submits that *Hoffman* fails to teach or suggest the foregoing claim features.

For example, an exemplary method corresponding to claim 1 is described in the specification at pg. 67 in reference to Fig. 46. The method uses a mapping table as shown in Fig. 30 and corresponding values present in the selected packet types for performing actions (see pg. 66) once a threshold count of the selected type of packets has been reached.

By way of contrast, *Hoffman* discloses an apparatus which detects congestion in an output port of a network element that includes a CPU and a switching element. (Col. 5, ll. 6-9). A congestion signal is output when a value when a congestion threshold is detected in the output port (i.e., a value in the switching element free register represents a certain value). (Col. 5, ll. 28-31). Random packets are then discarded in response to the congestion signal. While *Hoffman* could generally be considered to have a packet counter for counting selected packets (col. 5, ll. 39-50; and col. 22, ll. 28-32), the count is

used for representing the bandwidth to a CPU to lower a negotiated priority of any future packet of that selected type (col. 5, ll. 45-50).

Hoffman does not disclose or suggest that an action is performed based on a field value in the packet and a corresponding table designating an action for the field value if the count has surpassed a threshold value.

Accordingly, *Hoffman* does not teach or suggest *the programmable counter unit includes a rules table therein, said rules table storing rules which control packet flow based on values set in fields of a selected packet type, after a number of counted packets of a selected packet type exceeds a predetermined threshold* as recited in claims 1-4 and 5-9.

Furthermore, *Hoffman* does not teach or suggest *the fields of the selected packet type include a new code point action field* (claim 7), *wherein the new code point action field may be set to a value for one of no action, assign a new code point, assign the new code point and change the priority of the selected packet, and drop the packet* (claim 8), or *wherein if the value for the new code point action field indicates assign the new code point, a class of service is changed for the selected packet* (claim 9).

For all the foregoing reasons, Applicant submits claims 1-4 and 6-9 are not anticipated by *Hoffman* and respectfully requests the Examiner to reconsider and withdraw the §102 rejection based thereon.

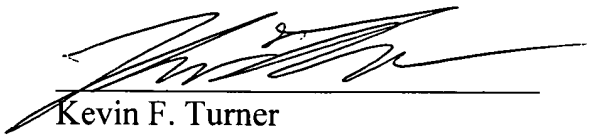
NEW CLAIMS

By this amendment, Applicant adds new claims 7-9 and respectfully requests examination and favorable consideration thereof. Support for new claims 7-9 can be found in the instant specification at pages 66-69. No new matter is included by new claims 7-9, which are patentable at least for the reasons previously discussed above.

In view of the foregoing, reconsideration and allowance of the application is believed to be in order and such actions are hereby solicited. If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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